



DELAWARE RIVER BASIN COMMISSION  
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Executive Director

September 1, 2006

## REQUEST FOR PROPOSAL & QUOTATION

To Whom It May Concern:

The Delaware River Basin Commission (DRBC) desires to implement an integrated database management system and define the necessary related Standard Operating Procedures (SOPs). The DRBC is seeking a qualified firm or individual(s) (contractor) to partner with for this initiative.

### **Project Background**

The DRBC is a regional body with the regulatory authority to oversee a unified approach to managing a river system without regard to political boundaries. DRBC programs include water quality protection, water supply allocation, regulatory review (permitting), water conservation initiatives, watershed planning, drought management, flood control, and recreation. Additional information about DRBC can be obtained from our website ([www.drbc.net](http://www.drbc.net)).

DRBC seeks to retain a knowledgeable database consultant partner to implement an integrated database management system and define the necessary related Standard Operating Procedures (SOPs). Currently, the DRBC maintains its water related data in three decentralized data stores utilizing disparate formats (e.g., Microsoft Access, Microsoft Excel). The data stores are organized in the following sets: Project Review, Water Charging, and Water Use. The data sets are not structured in a means so that they relate to each other, and they are stored on individual desktop PCs such that they can not be effectively shared or accessed simultaneously. In addition to producing reports and basic ad-hoc queries necessary to answer the question at hand, these data are also utilized by DRBC's Geographical Information System (GIS) ArcView in order to enable the staff to perform spatial analysis.

In addition to these three data sets, DRBC uses two other decentralized databases for administrative purposes: communication contact database and mail log database. These databases would be included in the integrated database management system.

DRBC's goal for this initiative is to implement a new centralized relational database management strategy and system in a secure and reliable environment that provides staff an effective and efficient means to manage, query, and report their data such that it supports DRBC mission.

This initiative will be undertaken in two phases. The first phase (Phase I) will be to design and implement the centralized relational database system. Phase I will also include the translation and import of DRBC's three existing water databases and two administrative databases. This RFP addresses only Phase I of this initiative; however, the consultant must be considerate of Phase II. The second phase (Phase II) will be to develop web interfaces (i.e., intranet & internet) into the database and implement any auxiliary databases such as an integrated document management system for the library.

## **Functional Specifications**

The DRBC believes that the following functional specifications will provide the system necessary to support this initiative. Contractors are free to suggest alternative solutions provided they include a thorough explanation as to why they are making such suggestion.

### **I. Database & Authentication Server Hardware, Operating System & Backup Utility Software**

Contractor shall provide all hardware and software for the implementation of Phase I. Refer to APPENDIX A for minimum system specifications.

### **II. Web Server Hardware & Software**

DRBC's website will be hosted by the State of New Jersey OIT. Web interfaces with the database will be in Phase II of the initiative (Phase II work is not part of this RFP).

### **III. Database - Microsoft SQL Server 2005 (Standard Edition)**

DRBC intends to use Microsoft SQL Server 2005 Standard Edition to meet its database management needs. Microsoft SQL Server 2005 Standard Edition is the data management and analysis platform for small and medium-sized organizations. It includes the essential functionality needed for e-commerce, data warehousing, and line-of-business solutions. Standard Edition's integrated business intelligence and high-availability features provide organizations with the essential capabilities needed to support their operations.

### **IV. GIS and Report Writer Software**

DRBC will utilize its existing ArcView client licenses and Crystal Reports for its GIS and Report Writer tools. These applications and their anticipated future versions will need to be integrated with the new database system.

### **V. Database Design**

Initially the database will store the converted existing data that are less than 500MB in size; however, the database should be designed to support 5GB of data. It is projected that initially there will be less than 12 simultaneous users of the system.

The database design will need to include all of the data elements from the three existing data sets (i.e., Project Review, Water Charging, Water Use) that are described in APPENDIX B as well as the two additional administrative databases (not described). In addition, the following data elements need to be incorporated into the design:

- within the Project Review database there are several more fields needed from the docket document;
- within the Project Review database interested parties data as needed (see APPENDIX C); and
- within the Project Review & Water Charging databases include fields for file pointer links to Word documents.

Additional data elements may be identified during the database design process, and the objectives of Phase II must be considered when designing the database.

The new database design must normalize the existing database structure (e.g., Water Charging: repeat data entry – credit tracking; multiple Water Use databases from each state and the historical file, etc.).

The database design must establish standard identifiers and nomenclature for related common/key fields among the water use data sets (e.g., DRBC/Project/Permit\_ID; Applicant/Owner/User/Company Name; Water Source/River, etc.).

The database design must ensure data security and contain defined users with appropriate read/write access rights to their relevant data. The user types identified are:

- Database Administrator (DBA)
- Read/Write – Project Review
- Read/Write – Water Charging
- Read/Write – Water Use
- Read/Write – Communications Contact
- Read/Write – Library/Document Management
- GIS Read Only User
- Read Only Data Browser.

Required in the design of the database is the design of approximately twelve (12) standard reports and associated queries. Refer to samples included in APPENDIX C. Also required in the design of the database is the design of approximately twelve (12) standard data entry forms with data QA/QC components. Refer to samples included in APPENDIX C.

The database design will also need to accommodate significant updates and replacement of water use data from the basin state agencies. See APPENDIX D for more information on these and other user data requirements.

## **VI. Minimum Client System Requirements**

The database system will need to support end users with a minimum client system configuration of:

Microsoft Windows 2000; 1.6 Ghz Processor; 256 MB RAM; 40 GB Hard Drive

## **VII. Future Considerations**

The DRBC database initiative will be undertaken in two phases. The first phase (Phase I) will be to design and implement the database system. Phase I will also include the translation and import of DRBC's existing data and integrating the database with DRBC's

existing ArcView application. This RFP addresses only Phase I of this initiative. The second phase (Phase II) will be to develop web interfaces from the database into user-friendly intranet and World Wide Web websites, as well as to implement any auxiliary DRBC databases such as the communications contacts database. Phase II will also include the implementation of an integrated document management system for DRBC's library.

## **Project Scope of Work**

### **Timeframe**

The timeframe for completion of the project scope of work (Phase I) is six months.

### **Scope**

- I. Server Hardware Configuration and Implementation, including hardware and software acquisition<sup>1</sup>
- II. Server Integration into Secure Network
- III. Software Configuration and Implementation
  - a. Microsoft SQL Server 2005 (Standard Edition)
  - b. Database Backup Utility
  - c. Integration with Existing ArcView GIS and Crystal Reports Report Writer Software
- IV. Database Design and Creation
  - a. Tables
  - b. Queries
  - c. Reports
  - d. Users/Security
- V. Conversion and Import of Existing Data
  - a. All of the existing DRBC water use data will need to be converted and imported into the new database design. This will include extensive re-working of the existing data and developing loading scripts with data quality controls to import into the new database. Refer to APPENDIX B (DRBC Current Database Structure supplied by DRBC staff) and Section V. (Database Design) of the Functional Specifications defined herein.
- VI. Drafting of Standard Operating Procedures (SOPs) for Database System
  - a. SOP Requirements:
    - i. Database Schema & Data Dictionary
    - ii. Modification of Database Structure Revision Documentation
    - iii. Creation of Queries
    - iv. Creation of Reports
    - v. Creation of Users
    - vi. Standard Reports
    - vii. Database Security, Backup and Archive
- VII. Training
  - a. System Administrator (1)
  - b. Database Administrator (1)
  - c. End Users (~6-8)

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<sup>1</sup> Purchase of hardware and software to meet or exceed specifications outlined in Appendix A including purchase of Microsoft SQL Server 2005 Standard Edition

**IMPORTANT NOTE FOR CONSIDERATION:** There may be the possibility of DRBC leveraging the database design from Susquehanna River Basin Commission's (SRBC) centralized database system. Because SRBC is a similar organization to DRBC, it is assumed that the necessary modifications to the data schema would be minor. Should DRBC obtain SRBC's database design, the Scope of Work defined herein would be adjusted accordingly.

## **Response to RFP**

### **Contents of Proposal and Qualifications:**

Interested parties shall submit 10 copies of a) a proposal for this work including documentation of their qualifications and b) cost estimates in a separate sealed envelope marked "Cost Proposal" to:

Richard C. Gore, Chief Administrative Officer  
Delaware River Basin Commission  
25 State Police Drive  
P.O. Box 7360  
West Trenton, NJ 08628

Submittals must be received at the Commission's offices no later than **4:00 p.m., Friday, October 13, 2006**. Proposals received after this time will not be considered.

All Proposals must be submitted in the format defined herein.

Consultants will be selected in accordance with Delaware River Basin Commission's procedure for selection for "Professional Services". Delaware River Basin Commission reserves the right to reject any submittals. Attached is the Commission's standard contract. If the contractor cannot execute the contract in its current form, the contractor must describe the exceptions in the cost proposal.

Any questions should be directed to David Sayers at (609) 883-9500 x236.

### ***Required Format for Proposals:***

#### **A) Proposal Composition**

The proposal must not exceed 10 pages (5 sheets, double-spaced, two-sided printing, and font no less than 12 pt). Supporting documentation is similarly limited to 20 pages (10 sheets, double-spaced, two-sided printing, and font no less than 12 pt). Proposals and supporting documentation exceeding the specified page limit will not be considered. The proposal must include an estimate of hours required for completion of each task and must indicate if subcontractors are to be used.

#### **B) Qualifications**

- I. Company Background
  - a. Contact Information
  - b. Company Size (Staff & Annual Revenues)
  - c. Experience on similar projects (list 3 examples with references and brief project summaries)
  - d. Proposed Project Team with Resumes
  - e. Location of office where work will be performed

- II. Project Management
  - a. Project Methodology & Approach to Scope of Work
  - b. QA/QC & Testing Methodology
  - c. Define Project Deliverables
  - d. Proposed Project Schedule

III Approach to Project Change Order Management

**C) Cost Proposal (Provided in a separate sealed envelop labeled “Cost Proposal”)**

- a. Proposed Fixed Fee for Project
  - i. Labor Costs, including Hours per task.
  - ii. Non-Labor Costs, including Hardware and Software Costs and Other Project Expenses
- b. Post Implementation Support (as needed)
  - i. Hourly Rate

**Note: utilize attached form for your bid**

**NOTE: Place in a separate sealed envelope marked “Cost Proposal”**

**DRBC Database Project**

**Table 1: Consultant Cost Proposal**

SCOPE TASK	Estimated Labor		Non-labor Cost	Total Task Cost
	Hours	Cost		
I. Server Hardware Acquisition Configuration and Implementation <sup>1</sup>				
II. Server Integration into Secure Network				
III. Software Configuration and Implementation				
IV. Database Design and Creation				
V. Conversion and Import of Existing Data				
VI. Draft SOPs/Documentation				
VII. Training				
<b>Estimated Project Totals</b>				

<sup>1</sup> Includes Purchase of Hardware & Software to meet or exceed specifications outlined in Appendix A, including purchase of Microsoft SQL 2005 Standard Edition

Hourly Rate for Post Implementation Support \_\_\_\_\_

SIGNED: \_\_\_\_\_

DATE: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_